

Appin. No. 10/707,422
Docket No. 139805/GEM-0091

REMARKS / ARGUMENTS

Status of Claims

Claims 1-30 are pending in the application and stand rejected. Applicant has amended Claims 1, 4, 12, 20 and 27, leaving Claims 1-30 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a) have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

Rejections Under 35 U.S.C. §102(b)

Claims 1-4, 10-15, 18-23 and 26-29 stand rejected as being anticipated by Pfoh (U.S. Patent No. 5,657,364, hereinafter Pfoh).

Applicant traverses this rejection for the following reasons.

Applicant respectfully submits that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, *in a single prior art reference.*" *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). Moreover, "[t]he identical invention must be shown in as complete detail as is contained in the *** claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Furthermore, the single source must disclose all of the claimed elements "arranged as in the claim." *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). Missing elements may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 780, 227 U.S.P.Q. 773, 777 (Fed. Cir. 1985).

Applicant has amended Independent Claim 1 to now recite, inter alia,

"...a sensor device disposed in the housing that interprets a position of the x-ray beam for calculating a position of a focal spot, the sensor device being disposed in the

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housing such that an area of the x-ray allowed to fall on the sensor device changes in response to movement of the focal spot."

Applicant has amended Independent Claim 12 to now recite, inter alia,

"...means for calculating a position of a focal spot;

wherein an area of the x-ray is allowed to fall on the means for calculating such that the area changes in response to movement of the focal spot."

Applicant has amended Independent Claim 20 to now recite, inter alia,

"...and a sensor device disposed in the housing that interprets a position of the x-ray beam for calculating a position of the focal spot, the sensor device being disposed in the housing such that an area of the x-ray allowed to fall on the sensor device changes in response to movement of the focal spot."

Applicant has amended Independent Claim 27 to now recite, inter alia,

"...calculating a position of [[a]] the focal spot in response to an area of the x-ray beam allowed to fall on a sensor device changing in response to movement of the focal spot."

No new matter has been added by these amendments as antecedent support may be found in the specification as originally filed, such as at Paragraph [0026] and Figures 3-5 for example.

Dependent claims inherit all of the limitations of the respective parent claim.

In comparing Pfoh with the instant invention, Applicant finds Pfoh to disclose x-ray attenuators 108, 110 that are *placed over* respective cells 100, 102, where slots 112, 114 extend through attenuators 108, 110, respectively, so that only a portion of each detector cell 100, 102 is in free communication with x-ray beam 16, and where *the signal intensity* from cell 100 increases and *the signal intensity* from cell 102 decreases in response to movement of focal spot 116. Column 4, lines 29-44, and Figure 4. Emphasis added.

At column 5, lines 15-20, Applicant finds Pfoh to disclose *a signal ratio* that is sensitive to focal spot movement and is used to determine the actual focal spot position.

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Here, Applicant finds Pfoh to disclose *signal strengths* and *a signal ratio* that are used to determine focal spot position, and not *an area of the x-ray that is allowed to fall on the sensor device where the area changes in response to movement of the focal spot* for determining the position of the focal spot, as now claimed in the independent claims.

At Paragraphs [0025-0026] and Figures 3-5 of the instant application, Applicant discloses and illustrates sensor devices 56, 58 that are set back from opening 60, thereby allowing a shadow effect that causes *an area 62, 64 of the x-ray 16 allowed to fall on the sensor device 56, 58 to change in response to movement of the focal spot 52*.

At column 4, lines 29-44, and Figure 4 of Pfoh, Applicant finds no such arrangement to allow a shadow effect to cause an area of the x-ray allowed to fall on the sensor device to change in response to movement of the focal spot

Accordingly, Applicant submits that Pfoh does not disclose all of the claimed elements arranged as in the claim, and absent anticipatory disclosure in Pfoh of each and every element of the claimed invention arranged as in the claim, Pfoh cannot be anticipatory.

Regarding Claim 4 Specifically

Applicant has amended Claim 4 to now recite, inter alia,

"...wherein the sensor device includes at least two detector elements arranged next to each other such that the x-ray beam passing through a same of the opening is allowed to strike two of the at least two detector elements."

No new matter has been added by this amendment as antecedent support may be found in the specification as originally filed, such as at Paragraph [0025] and Figures 3-4 for example.

Dependent claims inherit all of the limitations of the respective parent claim and any intervening claim.

In comparing Pfoh with the instant invention, Applicant submits that Pfoh does not disclose an x-ray beam passing through *the same opening* and being *allowed to strike two detector elements*. On the contrary, Applicant finds Pfoh to disclose an x-ray beam passing through *a first opening* 112 to strike *a first detector element* 100, and an x-ray

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beam passing through *a second different opening* 114 to strike *a second different detector element* 102, with no cross communication thereof. Column 4, lines 29-44, and Figure 4.

Accordingly, Applicant submits that Pfoh does not disclose all of the claimed elements arranged as in the claim, and absent anticipatory disclosure in Pfoh of each and every element of the claimed invention arranged as in the claim, Pfoh cannot be anticipatory.

In view of the amendment and foregoing remarks, Applicant submits that Pfoh does not disclose each and every element of the claimed invention arranged as claimed and therefore cannot be anticipatory. Accordingly, Applicant respectfully submits that the Examiner's rejection under 35 U.S.C. §102(b) has been traversed, and requests that the Examiner reconsider and withdraw of this rejection.

Rejections Under 35 U.S.C. §103(a)

Claims 5-9, 16, 17, 24, 25 and 30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Pfoh as applied to Claims 1, 4, 12, 20 and 27 above, and further in view of Warren (U.S. Patent No. 6,362,481 B1, hereinafter Warren).

Applicant traverses these rejections for the following reasons.

Applicant respectfully submits that the obviousness rejection based on the References is improper as the References fail to teach or suggest each and every element of the instant invention. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner must meet the burden of establishing that all elements of the invention are taught or suggested in the prior art. MPEP §2143.03.

The Examiner acknowledges that Pfoh is deficient in anticipating the claimed invention, and looks to Warren to cure these deficiencies. Paper 29042005, pages 4-5.

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As discussed above regarding the rejections under 35 U.S.C. §102, Applicant has amended independent Claims 1, 12, 20 and 27 to overcome the anticipation rejection with respect to Pfoh, herein acknowledges that Warren was not applied for purposes of anticipation, and herein submits that Warren does not cure the further deficiencies of Pfoh.

Dependent claims inherit all of the limitations of the respective parent claim and any intervening claim.

In view of the foregoing, Applicant submits that the References fail to teach or suggest each and every element of the claimed invention and are therefore wholly inadequate in their teaching of the claimed invention as a whole, fail to motivate one skilled in the art to do what the patent Applicant has done, fail to offer any reasonable expectation of success in combining the References to perform as the claimed invention performs, and discloses a substantially different invention from the claimed invention, and therefore cannot properly be used to establish a prima facie case of obviousness. Accordingly, Applicant respectfully requests reconsideration and withdrawal of all rejections under 35 U.S.C. §103(a), which Applicant considers to be traversed.

In light of the forgoing, Applicant respectfully submits that the Examiner's rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a) have been traversed, and respectfully requests that the Examiner reconsider and withdraw these rejections.

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The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 07-0845.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above identified Deposit Account.

Respectfully submitted,

CANTOR COLBURN LLP

Applicant's Attorneys

By: 

David Arnold
Registration No: 48,894
Customer No. 23413

Address: 55 Griffin Road South, Bloomfield, Connecticut 06002
Telephone: (860) 286-2929
Fax: (860) 286-0115